



BEFORE lightning strikes...protect yourself!

Lightning can hit anyone who is in the wrong place at the wrong time.



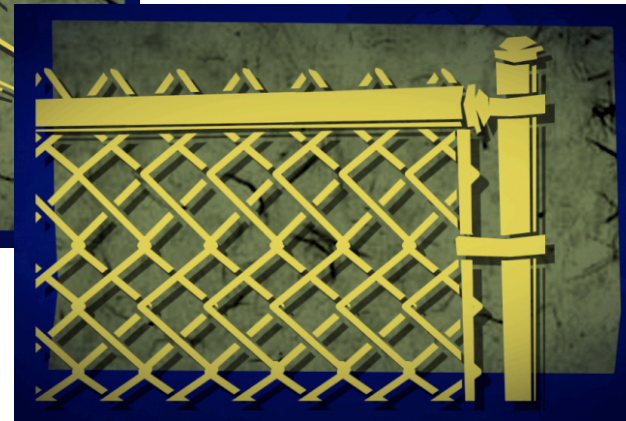
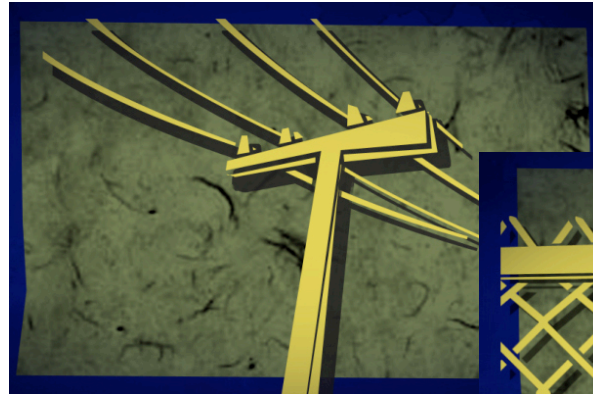
WHAT is lightning?

- Lightning is the buildup and release of electrical energy.
- One ground lightning stroke can generate up to 100 million volts of electricity.
- This electric bolt from the sky then heats the surrounding air to
 - 50,000 degrees Fahrenheit
 - 28,000 degrees Celsius
- This creates the amazing sound waves that we hear as thunder.



WHERE will lightning hit?

- Tall things
- Metal
- Water



- OR...a person standing on open ground or on a roof

RESULTS of lightning?

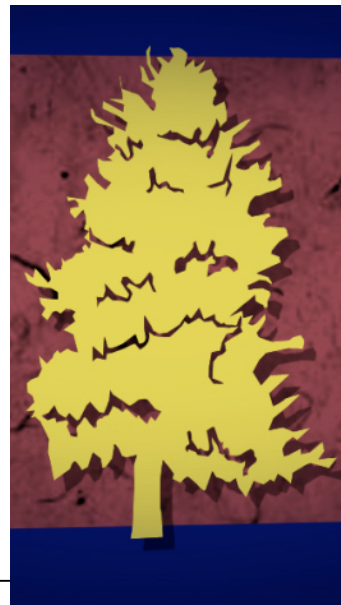
- 24,000 lightning deaths and 240,000 injuries occur each year worldwide.
- If someone is hit by lightning... it can cause
 - Burns
 - Nervous system damage
 - Other health problems.
- Lightning can...
stop the heart!



BEFORE lightning strikes - protect yourself!

AVOID...

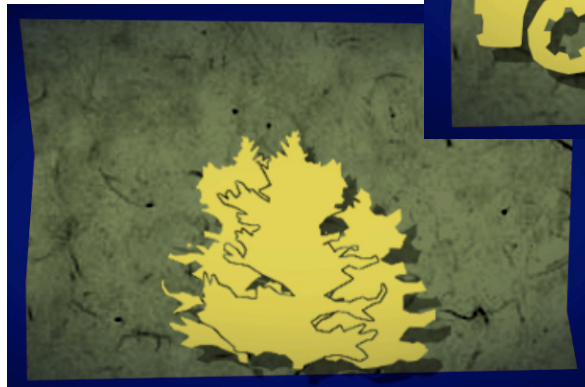
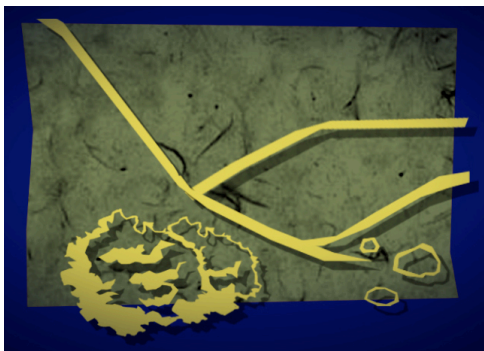
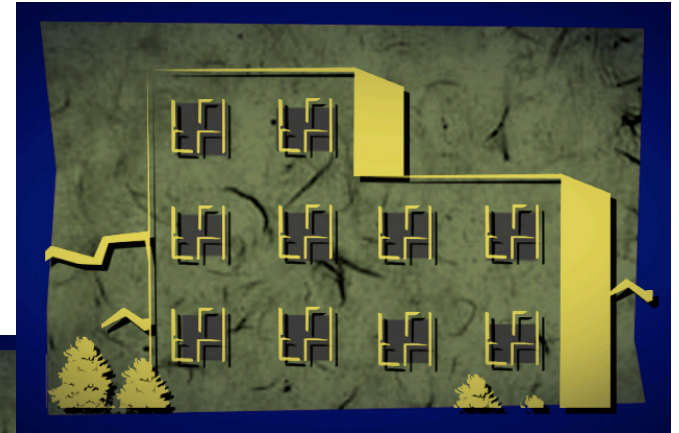
- High ground
- Metallic objects
- Solitary trees
- Water



BEFORE lightning strikes - protect yourself!

SEEK...

- Shelter in a building
- Safety inside a vehicle—without touching metal
- A cluster of small trees or bushes
- Lower elevations



The lightning crouch

Use the lightning crouch

...if you're caught outside and can't get to a shelter.

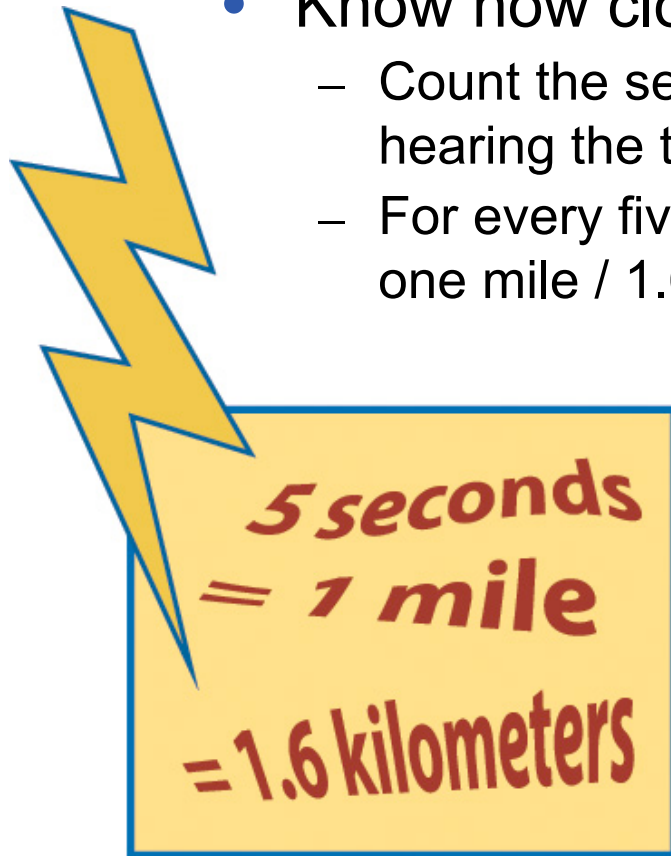


- Put your feet together.
- Squat down.
- Tuck your head.
- Cover your ears.

When the immediate threat of lightning has passed,
continue heading to the safest place possible.

Use the 30-30 Rule.

- Know how close you are to a lightning strike.
 - Count the seconds between seeing the flash and hearing the thunder.
 - For every five seconds you count, the lightning is one mile / 1.6 kilometers away.



Use the 30-30 Rule.

- **Count 30 seconds**—If the time between when you see the flash and hear the thunder is 30 seconds or less, the lightning is close enough to hit you. Seek shelter immediately.



**30
seconds**



- **Count 30 minutes**—After the last flash of lightning, wait 30 minutes before leaving your shelter. More than one half of lightning deaths occur after a thunderstorm has passed.

The best protection

BE READY

**BEFORE
LIGHTNING STRIKES**

Before Lightning Strikes—Resources

Special thanks to:

Center to Protect Worker Rights

<http://www.cdc.gov/eLCOSH/docs/d0200/d000282/d000282.html>

National Lightning Safety Institute

<http://www.lightningsafety.com/>

National Oceanic & Atmospheric Administration

<http://www.noaa.gov/lightning.html>

Holle, R.L., 2007: Annual rates of lightning fatalities by country.
International Conference on Lightning and Static Electricity